

Title (en)
AUTOMATED IDENTIFICATION AND ASSEMBLY OF SHOE PARTS

Title (de)
AUTOMATISIERTE IDENTIFIKATION UND MONTAGE VON SCHUHTEILEN

Title (fr)
IDENTIFICATION ET ASSEMBLAGE AUTOMATISÉS DE PIÈCES DE CHAUSSURE

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EP 3358486 A1 20180808 (EN)

Application
EP 18000271 A 20121116

Priority

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Abstract (en)

A system (10) that positions and attaches a shoe part in an automated manner during a shoe-manufacturing process, the system (10) comprising: an image recorder that records an image (228) depicting a two-dimensional representation (232) of an attachment shoe part (224), which is to be attached to a base shoe part (226); computer storage media having stored thereon computer-executable instructions that, when executed, cause a computing device to: (A) identify at least one reference feature (258) of the two-dimensional representation (232) of the attachment shoe part (224), (B) determine a geometric coordinate (205) of the attachment shoe part (224) in a geometric coordinate system (225), which maps a three-dimensional space within which the attachment shoe part (224) is positioned and a manufacturing tool (3310) operates, and (C) determine another geometric coordinate (203) in the geometric coordinate system (225) by analyzing a different image (230) of the base shoe part (226); and the manufacturing tool (3310) comprising: (A) a part pickup tool (3100) having a bottom surface adapted for contacting the attachment shoe part (224), and (B) a welding tool (3210) integrated into the part pickup tool (3100), the welding tool (3210) comprised of a distal end (3212) adapted for contacting the attachment shoe part (224) such that the distal end (3212) extends at least to a plane defined by the part pickup tool (3100) bottom surface, wherein the manufacturing tool is notified of the other geometric coordinate (203) and is adapted to transfer the attachment shoe part (224) from the geometric coordinate (205) to the other geometric coordinate (203), thereby moving the attachment shoe part (224) to a location in the three-dimensional space at which the attachment shoe part (224) is to be attached to the base shoe part (226).

IPC 8 full level

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CPC (source: EP KR US)

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C-Set (source: EP US)

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Citation (search report)

- [A] ES 2142239 A1 20000401 - UNIV MURCIA [ES]
- [A] WO 2010034044 A2 20100401 - STIWA HOLDING GMBH [AT], et al
- [A] US 5148591 A 19920922 - PRYOR TIMOTHY R [CA]

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